



Forest Insect & Disease Management

Survey Report

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DETECTION SURVEY SMALLER EUROPEAN ELM BARK BEETLE BY PHEROMONE TRAPPING

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- INTRODUCTION** The smaller European elm bark beetle (Scolytus multistriatus Marsh) is one of the major vectors of the Dutch elm disease. Its presence in northern Wisconsin and the Upper Peninsula, Michigan, is not known.
- A Forest Service research team at Delaware, Ohio, has developed and tested an aggregating pheromone which attracts both sexes of the smaller European elm bark beetle.
- Traps and pheromone were supplied by the Northeastern Forest Experiment Station, Delaware, Ohio. Trap placement and replacement was done by personnel of each Ranger District on which they were located.
- OBJECTIVE** To detect the presence of the smaller European bark beetle (SEEBB) areas on or adjacent to the Chequamegon, Nicolet and Ottawa National Forests where Dutch elm disease (DED) is present.
- METHODS** Two DED centers were selected in each of the three National Forests. Centers were selected to represent a southern (or western) and a northern (eastern) area of DED infection on each Forest. Ranger Districts and trap locations were:
- Chequamegon N.F.
 - Medford - T34N, R3W, Sect. 25&26
 - Glidden - T44N, R4W, Sect. 1&12
 - Nicolet N.F.
 - Lakewood - T32N, R16E, Sect. 11
 - Three Lakes - T39N, R14E, Sect. 7
 - Ottawa N.F.
 - Bergland - T47N, R46W, Sect. 17&18
 - Iron River (trap set out south of Crystal Falls) - T44N, R34E, Sect. 27
- At each location nine pheromone-baited traps were set out in a design approximately 1/2 -mile square with a single trap at the center of the array. The center trap was located on a DED-infected or killed tree. The remaining eight traps were placed on elm or other hardwood trees. Traps were stapled approximately 6 feet above ground around the tree bole.

Each trap consisted of a white cardboard sheet (26 x 48 inches) treated with Tanglefoot on one surface. The pheromone, impregnated in plastic (1" x 1"), was fastened in the center of the trap.

Traps were placed in the field in late May. They were replaced twice during the season of exposure which ended in late September for all areas except Lakewood Ranger District where the last series were not removed until late October.

All traps were mailed to the St. Paul Field Office for examination and identification of SEEBB.

RESULTS

The only trap location which caught SEEBB was on the Lakewood Ranger District, Nicolet National Forest. These traps were in T23N, R16E, Sect. 11 east of Paya Lake. A total of 55 SEEBB were caught at that location over the trapping period. Most of these (46) were caught during the last trap period.

Native elm bark beetles were caught at all locations in relatively large numbers.